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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/800,403
Filing Date: March 12, 2004
Appellant(s): BOYER, FRANK

Royal W. Craig
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/23/2009 appealing from the Office action mailed 12/20/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

Claim 3 is rejected under 35 USC 112 (first) and (second) paragraphs.

Claim 3 is rejected under 35 USC 102(b).

Claim 3 is rejected under 35 USC 103(a).

(4) Status of Amendments After Final

The amendments after final filed on 8/20/2009 and 11/23/2009 are identical and have been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

2,348,114	Dow	5/2/1944
2,315,207	Janecek et al.	3/30/1943
2,372,315	Catron	3/27/1945
4,386,477	Briley	6/7/1983
4,058,925	Linde et al.	11/22/1977

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4, use of the phrase "a shotgun" makes the claim indefinite as to whether the previously claimed 'shotgun' (claim 1, line 2) or some other shotgun is intended. If the previously claimed shotgun is intended, the claim language should read [said shotgun]. Please clarify.

2. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as **failing to comply with the written description requirement**. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As amended, applicant claims "said stepwise taper … along at least two-thirds a length of said channel". In the written description, as originally filed, applicant only has support for "through approximately 2/3 the length of the choke".

3. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as **failing to comply with the enablement requirement**. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As amended, applicant claims "said stepwise taper … along at least two-thirds a length of said channel". In the written description, as originally filed, applicant only has an enabling support for "through approximately 2/3 the length of the choke".

4. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Dow (114).

Dow (114) discloses a choke with associated shotgun comprising:

a) a hollow tubular member;	see figs. 2, 4, 6
b) a coupling at one end;	12
c) a stepwise taper;	32
d) evenly spaced annular projections; and	32
e) a shotgun.	page 1, col. 1, line 10

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Janecek et al. (207) in view of Catron (315).

Janecek et al. (207) disclose a muzzle attachment comprising:

a) a hollow tubular member;	4 or 11
b) a coupling at one end;	see figs. 2, 4, 9

c) a stepwise taper;	5 or 12
d) evenly spaced annular projections;	5 or 12; page 1, col. 1, lines 52-53
e) separated wadding; and	2, 8, 9
f) a projectile.	1, 6, 7

Janecek et al. applies as recited above. However, undisclosed is a projectile that is composed of a plurality of shots. Catron teaches a projectile enclosed by wadding that is composed of a plurality of shots 39, 40, 41. Applicant is substituting one projectile arrangement for another in an analogous art setting as explicitly encouraged by the primary reference (see Janecek et al., page 2, col. 1, lines 5 and 41-45; and compare figs. 1, 3, 8, and 10) with expected or predictable results (see KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 406 (2007)). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Catron to the Janecek et al. muzzle attachment and have a muzzle attachment that is used in combination with shot projectiles.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Briley (477) in view of Janecek et al. (207).

Briley (477) discloses a choke and associated shotgun comprising:

a) a hollow tubular member with internal taper; and	10
b) a coupling that consists of an external series of screw threads.	12

However, undisclosed is a plurality of evenly spaced steps located along at least 2/3 of the taper. Janecek et al. (207) teach a plurality of evenly spaced steps located along at least 2/3 of the taper (see figs. 2 or 4). Applicant is substituting one internal surface arrangement of the taper

for another as explicitly encouraged by Janecek et al. (compare figs. 2 and 4 with figs. 7 and 9) with expected or predictable results (see KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 406 (2007)). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Janecek et al. to the Briley choke and have a choke whose taper includes evenly spaced steps.

7. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Linde et al. (925).

Linde et al. (925) disclose a choke with associated shotgun comprising:

a) a hollow tubular member;	see fig. 6
b) a coupling at one end;	84
c) a stepwise taper;	92-106
d) evenly spaced annular projections;	92-106
e) a ramp; and	92-106
e) a shotgun.	see abstract

(10) Response to Argument

Applicant's arguments are addressed as follows:

1) With regard to the rejection of claim 3 under 35 USC 112 (second) paragraph, it is argued that use of the phrase "a shotgun" in claim 1, line 3 does not make the claim indefinite. It is further argued that the preamble makes it clear that the present invention is intended to be used with an existing shotgun. In response, the issue in this rejection is merely whether the phrase "a shotgun" is intended to reference the shotgun mentioned in the preamble or not. If is intended to be so referenced it should be claimed as [said shotgun]. If not, it must be directed to some other existing shotgun and should be claimed as [another shotgun]. As currently claimed, it is not clear

which of these alternative interpretations is intended. Is the preamble intended to be incorporated into the claim language or is it not? As currently claimed, this cannot be determined. Since the meets and bounds of the claim language cannot be determined, the claim is considered to be indefinite.

2, 3) With regard to the rejection of claim 3 under 35 USC 112 (first) paragraph, it is argued that the phrase "step-projections spaced evenly along at least two-thirds a length of said tapered channel" is amply supported because the phrase "spaced evenly along approximately two-thirds a length of said channel" is supported by the application as originally filed. In response, the phrase "at least 2/3 a length" includes 2/3 and longer lengths up to a full length of the channel. This is clearly unsupported by the application as originally filed (see page 7, first 3 lines of applicant's specification as originally filed).

Applicant further argues that he is entitled to claim 2/3 of a length of the channel. He is so entitled. However, this is not the same thing as claiming at least 2/3 of a length of the channel. It is further argued that applicant discloses steps and 1/10", 5/10", 9/10", 1 3/10", and 1 7/10" at points 30a through 30e as illustrated in fig. 2. However, undisclosed is how these lengths relate to the overall length of the channel. Consequently, they have no bearing on the issue of whether there is support for the claim language directed to "at least two-thirds a length of said tapered channel". Further note that the channel continues to taper in a same bore fashion along the remainder of inner channel 20.

4) With regard to the rejection of claim 3 under 35 USC 102(b) in view of Dow (114), the arguments are addressed as follows:

It is argued that Dow is directed to venting gases radially outwardly and has nothing to do with confining or focusing the shot pattern or a shotgun. In response, Dow does clearly teach venting gases as described. However, since Dow is explicitly recited as being used with a shotgun (col. 1, lines 7-10), it must inherently confine any portion of the shot pattern that deviates (see the figs. 4 and 6 embodiments of Dow) even if there is no explicit description of this function being performed.

It is further argued that Dow employs a series of exhaust apertures and slots. This is accurate. However, Dow also employs a series of steps or projections 32 (see figs. 4 and 6) which must inherently interact with any portion of the shot or wadding associated with a shot gun shell after firing of the shotgun.

It is further argued that Dow is a flash suppressor and not a choke. In response, Dow is clearly designed to be a gun stabilizer (see title of Dow) but must also inherently have other functions as would be inherent to the nature and design of the Dow shotgun and gun stabilizer combination.

It is further argued that Dow has no equivalent structure for confining or focusing the shot pattern of a shotgun. In response, Dow has almost identical structure to what applicant is claiming. Both structural arrangements involve tapered steps that narrow toward the muzzle end and are used with shotguns.

It is further argued that Dow lacks a pattern of annular sharp-edged steps from the input end through approximately 2/3 the length of the choke. In response, note that steps 32 (see figs. 4 and 6) are sharp-edged steps coming to a point; are in an annular configuration (see figs. 5 and 7); and extend the full length of the choke (see figs. 4 and 6). The function directed to catching

and retarding the cotton wad following the shot must be inherent because Dow explicitly states his intended usage with a shotgun.

It is further argued that the inner channel of applicant's invention is progressively constricted via annular steps to constrict the shot pattern. In response, clearly the Dow structure is also progressively constricted via annular steps (see figs. 4 and 6). However, the constriction of the shot pattern would begin at some point removed from the gun barrel 3 as the shot pattern spread while moving down the gun-stabilizing device 2 to the muzzle end of the gun-stabilizing device.

With regard to the issue of the gas vents being used to vent and disperse gas, this is clearly the case. However, it cannot be reasonably concluded that this would be the only function of the muzzle attachment when used in combination with a shotgun as taught by Dow. It is further argued that the examiner is equating gas vents with stepwise projections. In response, Dow clearly shows both vents 33 and step-wise projections or annular shoulders 32.

With regard to applicant's arguments, Dow clearly teaches a tubular member having a coupling at one end 2, 12. Dow also clearly teaches an internal channel running away from the coupling end 12, 32 (see figs. 4 and 6). Dow also clearly teaches sharp edges of the annular raised projections disposed toward the coupling end 32 (see figs. 4-7).

It is further argued that the vents of Dow are not in communication with the channel and do not define the channel. In response, clearly the vents of Dow are in communication with the channels of muzzle attachment 2 or gas could not be vented out of the attachment. Further, the vents are not intended to define the channel. The inside walls of attachment 2 as well as the annular steps 32 of attachment 2 define the inside walls. It is further argued that since the vents

are exterior to the channel, the channel cannot be defined as a plurality of raised projections. In response, the vents are not being relied upon to define the channel. The walls and annular steps 32 of attachment 2 are being relied upon to define the channel. It is further argued that the Dow vents are not sharp leading edges facing the shot. In response, annular steps 32 are being relied upon to teach this claim limitation.

It is further argued that the chamber or channel of Dow extends only partially through the tubular member. In response, note the fig. 4 and fig. 6 embodiments of Dow where the chamber or channel clearly extends along the full length of attachment device 2. It is further argued that the device would be inoperative because the shot pellets would spread in the chamber and destroy the vents. In response, there is no evidence to support this contention. However, the shot pellets would expand as argued by applicant in the chamber. They would then encounter the radial steps 32 and be confined until exiting the muzzle end 31 of attachment device 2. With regard to the issue of the internal channel having a stepwise taper running away from the coupling end, please note the internal channel of attachment device 2 with annular steps 32 extending in a stepwise fashion from the coupling end or barrel end 3 of the device (see figs. 4-7). Clearly the channel extends the full length of attachment device 2 and exists at muzzle end 31.

5) With regard to the rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Janecek et al. (207) in view of Catron (315), the arguments are addressed as follows:

It is argued that Janecek et al. and Catron are in non-analogous art. In response, both Janecek and Catron are directed to the firearm and associated projectile art. It is hard to image how much more analogous an art they could be in. It is further argued that Janecek is not

directed to the separation of wad from the associated shot. In response, note that Janecek is directed to separating one portion from another at the barrel end of the firearm. In this case, it is directed to separating the projectile portion from the carrier portion (see page 2, col. 1, lines 50-55 of Janecek). This seems quite analogous to separating the carrier or wad portion of a shotgun shell from its shot portion or projectile portion.

It is further argued that one of ordinary skill would not be motivated to use the Janecek device with the shotgun cartridges of Catron. In response, Janecek explicitly encourages the use of alternative projectile/carrier arrangements as taught by figs. 1, 3, 8, and 10 of Janecek and is clearly not intended to be used with a single projectile/carrier type.

It is further argued that any attempt to fire a shotgun shell out of the Janecek device would clearly destroy the Janecek device. This is a contention absent any argument or evidence to support it. If the Janecek device is designed to separate a carrier from a projectile as is clearly the case, the Janecek device would simply have a different type of projectile/carrier arrangement to separate in the combination of a shot gun wad and its associated shot projectiles.

With regard to the issue of motivation to combine, this has already been addressed but will be repeated. Janecek explicitly teaches or motivates substituting one projectile/carrier arrangement for another (see figs. 1, 3, 8, and 10 of Janecek). A shot gun shell is merely another type of projectile/carrier arrangement that includes a shot gun wad as the carrier and the shot gun shot as the projectile.

With regard to the claim limitations directed to a stepwise taper running away from the coupling end, please see fig. 2 and the knife edges 5 associated with the knife or steps 5. With regard to the issue of evenly of "raised annular step-projections spaced evenly along at least two-

thirds of said channel", clearly steps 5 in attachment device 4 meet these claim limitations. The issues directed to separating the shot from the wad have already been addressed. With regard to the issue of functioning as a choke device. Any shot exiting barrel 3 of Janecek would have to be choked or constricted by the steps 5 of attachment device 4.

6) With regard to the rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Briley (477) in view of Janecek et al. (207), the arguments are addressed as follows:

It is argued that Briley is directed to a shotgun choke without any wad stopping features. In response, the tapered section of Briley would certainly act to constrict the wad as it passed through. Whether or not it acted to stop the wad would depend upon the material and velocity of the wad as it passed through the tapered section of Briley.

It is further argued that one of ordinary skill would not look to Janecek as a potential combination because Janecek is intended to file down the size of a single-bullet as it passes. In response, Janecek is intended to separate a carrier portion from a projectile portion in this analogous art setting (see page 2, col. 1, lines 50-55 of Janecek). As such the Janecek device would separate the wad or carrier portion of the Briley shotgun shell from the projectile or shot portion of the Briley shotgun shell.

With regard to the issue of motivation to combine, Janecek clearly teaches and motivates substituting one tapered channel arrangement for another (compare figs. 2, 4, 7 and 9 of Janecek). With regard to the issue of an internal wad stopper, the step like knife edges 5 of Janecek would function to do this after combined with Briley.

With regard to the issue of the step projections spaced evenly along at least 2/3 of the channel, see the fig. 2 embodiment of Janecek. With regard to the issue of the step wise taper running away from the coupling end, see the fig. 2 embodiment of Janecek.

With regard to the issue of intended purpose, both applicant's invention and Janecek are designed to separate the carrier portion of the carrier/projectile from the projectile portion. They just have different types of carrier portions and different types of projectile portions.

7) With regard to the rejection of claim 3 under 35 USC 102(b) in view of Linde et al. (925), the arguments are addressed as follows:

It is argued that Linde has no portion that would act as a wad stopper. In response, note portions 108, 110, 112, and 114 of Linde (see fig. 6).

It is argued that the raised edges of Linde do not qualify as "sharp edge disposed toward said coupling end of said tubular member". In response, clearly the edges illustrated between bore diameters 100, 102, 104, and 106 are disposed toward the coupling end where barrel 10 is coupled. The issue of defining a sharp edge is clearly met because these edges clearly come to a point and as such must inherently have some degree of associated sharpness. Consequently, Linde can and must separate the wadding from the shot material to some degree via both the constricting or tapering arrangement and the sharp edges encountered between adjacent constricting sections.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Stephen M. Johnson/

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